International Application No PCT/JP2004/015662

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61K31/415 A61K31/42

A61P13/00

C07D231/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7-A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, CHEM ABS Data, BIOSIS, EMBASE, MEDLINE

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P	WO 03/086287 A (UNIV OHIO STATE RES FOUND; LIN HO-PI (US); SONG XUEQIN (US); CHEN CHI) 23 October 2003 (2003-10-23) paragraphs [0009], [0010]	1-13
P,X	EP 1 400 243 A (TANABE SEIYAKU CO) 24 March 2004 (2004-03-24) paragraphs [0001], [0009] table 2	1,3-6,14
X,P	VICKERSTAFFE, EMMA ET AL: "Fully Automated Polymer-Assisted Synthesis of 1,5-Biaryl Pyrazoles" JOURNAL OF COMBINATORIAL CHEMISTRY, 6(3), 332-339 CODEN: JCCHFF; ISSN: 1520-4766, 2004, XP008041537 the whole document	7-13

Purcher documents are listed in the continuation of box c.	X Patent failing members are listed in affect.
Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filling date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filling date but later than the priority date claimed	"T" later document published after the international fling date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report
25 January 2005	- 3. 06. 2005
Name and mailing address of the ISA European Patent Office, P.B. 5618 Patentlaan 2 NL - 2280 HV Rijswijk	Authorized Officer
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Bonzano, C

International Application No
PCT/JP2004/015662

ation) DOCUMENTS CONSIDERED TO BE BELEVANT	<u> </u>
Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
WO 01/42221 A (HAGEMAN MICHAEL J; MIYAKE PATRICIA J (US); STEFANSKI KEVIN J (US); HE) 14 June 2001 (2001-06-14) page 20, paragraph 3	1
US 6 440 963 B1 (TESTA RODOLFO ET AL) 27 August 2002 (2002-08-27) column 3, line 40 - column 4, line 40	1,3-6,14
EP 0 554 829 A (FUJISAWA PHARMACEUTICAL CO) 11 August 1993 (1993-08-11) page 1, paragraph 1	1-7,12, 13
ZHU, JIUXIANG ET AL: "Using Cyclooxygenase-2 Inhibitors as Molecular Platforms to Develop a New Class of Apoptosis-Inducing Agents" JOURNAL OF THE NATIONAL CANCER INSTITUTE, 94(23), 1745-1757 CODEN: JNCIEQ; ISSN: 0027-8874, 2002, XP008041497 the whole document	1-14
BOOTH, R. JOHN ET AL: "Polymer-Supported Quenching Reagents for Parallel Purification" JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, 119(21), 4882-4886 CODEN: JACSAT; ISSN: 0002-7863, 1997, XP002102299 the whole document	7-11
WO 02/18350 A (IKEDA SHOTA ; FUKUMOTO SHOJI (JP); TAKEDA CHEMICAL INDUSTRIES LTD (JP)) 7 March 2002 (2002-03-07)	1,6 7,12,13
WO 99/32454 A (DU PONT PHARM CO) 1 July 1999 (1999-07-01) the whole document	7
PRUITT J R ET AL: "Discovery of 1-(2-Aminomethylphenyl)-3-trifluoromethyl-N-[3-fluoro-2'- (aminosulfonyl)[1,1'-biphenyl)]-4-yl]-1H-p yrazole-5-carboxamide (DPC602), a Potent, Selective, and Orally Bioavailable Factor Xa Inhibitor" JOURNAL OF MEDICINAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY. WASHINGTON, US, vol. 46, no. 25, 4 December 2003 (2003-12-04), pages 5298-5315, XP002302832 ISSN: 0022-2623 the whole document	,
	WO 01/42221 A (HAGEMAN MICHAEL J; MIYAKE PATRICIA J (US); STEFANSKI KEVIN J (US); HE) 14 June 2001 (2001-06-14) page 20, paragraph 3 US 6 440 963 B1 (TESTA RODOLFO ET AL) 27 August 2002 (2002-08-27) column 3, line 40 - column 4, line 40 EP 0 554 829 A (FUJISAWA PHARMACEUTICAL CO) 11 August 1993 (1993-08-11) page 1, paragraph 1 ZHU, JIUXIANG ET AL: "Using Cyclooxygenase-2 Inhibitors as Molecular Platforms to Develop a New Class of Apoptosis-Inducing Agents" JOURNAL OF THE NATIONAL CANCER INSTITUTE, 94(23), 1745-1757 CODEN: JNCIEQ; ISSN: 0027-8874, 2002, XP008041497 the whole document BOOTH, R. JOHN ET AL: "Polymer-Supported Quenching Reagents for Parallel Purification" JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, 119(21), 4882-4886 CODEN: JACCSAT; ISSN: 0002-7863, 1997, XP002102299 the whole document WO 02/18350 A (IKEDA SHOTA; FUKUMOTO SHOJI (JP); TAKEDA CHEMICAL INDUSTRIES LTD (JP)) 7 March 2002 (2002-03-07) WO 99/32454 A (DU PONT PHARM CO) 1 July 1999 (1999-07-01) the whole document PRUITT J R ET AL: "Discovery of 1-(2-Aminomethylphenyl)-3-trifluoromethyl-N-[3-fluoro-2'-(aminosulfonyl)[1,1'-biphenyl)]-4-yl]-1H-p yrazole-5-carboxamide (DPC602), a Potent, Selective, and Orally Bioavailable Factor Xa Inhibitor" JOURNAL OF MEDICINAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY. WASHINGTON, US, vol. 46, no. 25, 4 December 2003 (2003-12-04), pages 5298-5315, XP002302832 ISSN: 0022-2623

International application No. PCT/JP2004/015662

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons: 1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely: 2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful international Search can be carried out, specifically: 3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a). Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet) This International Searching Authority found multiple inventions in this international application, as follows: see additional sheet 1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims. 2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. 3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: 3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a). Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet) This International Searching Authority found multiple inventions in this international application, as follows: see additional sheet 1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: 3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a). Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet) This International Searching Authority found multiple inventions in this international application, as follows: see additional sheet 1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a). Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet) This International Searching Authority found multiple inventions in this international application, as follows: see additional sheet 1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims. 2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. 3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
This International Searching Authority found multiple inventions in this international application, as follows: see additional sheet 1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims. 2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. 3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
see additional sheet 1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims. 2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. 3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
 As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
searchable claims. 2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. 3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
of any additional fee. 3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.: 4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is
covers only those claims for which fees were paid, specifically claims Nos.: No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is
4. X No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is rectified to the invention first mentioned in the claims; it is covered by claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is
1-14 (partially)
Remark on Protest
No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

- 1. claims: 1-14 (partially)
 - 1. A large conductance calcium activated K channel opener comprising a compounds of formula (Ia), where the ring Q is a 1,5 disubstituted pyrazole, where ring A is a benzene, B is benzene, heterocyclic, cycloalkane or cycloalkene.
- 2. claims: 1-14 (partially)

A large conductance calcium activated K channel opener comprising a compounds of formula (Ia), where the ring Q is a 1,5 di substituted pyrazole, where ring A is a thiophene, B is benzene, heterocyclic, cycloalkane or cycloalkene.

3. claims: 1-14(partially)

A large conductance calcium activated K channel opener comprising a compounds of formula (Ia), where the ring Q is a 1,5 di substituted pyrazole, where ring A is a pyridine, B is benzene, heterocyclic, cycloalkane or cycloalkene.

4. claims: 1-14(partially)

A large conductance calcium activated K channel opener comprising a compounds of formula (Ia), where the ring Q is a 1,5 di substituted pyrazole, where ring A is a pyrazole, B is benzene, heterocyclic, cycloalkane or cycloalkene.

5. claims: 1-14 (partially)

A large conductance calcium activated K channel opener comprising a compound of formula (Ia), where the ring Q is a 2,3 disubstituted pyrazole;

6. claims: 1-14 (partially)

A large conductance calcium activated K channel opener comprising a compound of formula (Ia), where the ring Q is a 3,4 disubstituted oxazole;

7. claims: 1-14 (partially)

A large conductance calcium activated K channel opener comprising a compound of formula (Ia), where the ring Q is a 4,3 disubstituted oxazole.

Information on patent family members

International Application No PCT/JP2004/015662

					1001/013002
Patent document cited in search report	Publication date		Patent family member(s)		Publication date
WO 03086287 , A	23-10-2003	AU CA EP WO US	2003230836 2485679 1499597 03086287 2003236294	A1 A2 A2	27-10-2003 23-10-2003 26-01-2005 23-10-2003 25-12-2003
EP 1400243 A	24-03-2004	EP JP US	1400243 2005053888 2005075359	Α	24-03-2004 03-03-2005 07-04-2005
WO 0142221 A	14-06-2001	- AAAAAAAAABBBBBCCCCCCCCCCCDDAAAAAAAABBBBBCCCCCCCC	283048 288897 1805901 1930301 777402 1931001 1931101 2041201 750978 2057101 2005200015 105808 105873 0008058 0008059 0008060 0008088 2362675 2362815 2362815 2362815 2362816 1376146 1379669 1411447 20012875 20013163 20013210 60016191 60018040 1150960 3639 3612 3464 200100419 1175214 1165072 1150959 1150950 1525883 1528058 20010589	-TTAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	15-12-2004 15-02-2005 18-06-2001 14-10-2004 18-06-2001 18-06-2001 18-06-2001 01-08-2002 18-06-2005 30-09-2002 30-04-2002 26-03-2002 26-03-2002 26-03-2002 26-03-2002 05-02-2002 05-02-2002 14-06-2001 14-06-2001 14-06-2001 14-06-2001 14-06-2002 13-11-2002 13-11-2002 13-03-2002 12-06-2002 12-06-2003 13-02-2004 17-03-2005 02-05-2005 28-08-2003 26-06-2003
		HU HU HU	0200409 0200580 0201450 0201463	A2 A2 A2	29-06-2002 28-11-2002 28-12-2002 28-05-2004
Form PCT/IS A/210 (natent family anney) / January 200					

Information on patent family members

International Application No
PCT/JP2004/015662

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
US 6440963 B1	l	IT BR CA WO EP HU JP NO PL US ZA	MI20010733 A1	07-10-2002 30-03-2004 17-10-2002 17-10-2002 21-01-2004 28-04-2004 14-10-2004 05-12-2003 13-12-2004 15-07-2004 13-09-2004
EP 0554829 A	11-08-1993	AT AU CA CDE DE EP EN HU JP RN NA US NA VS VS VS VS VS VS VS VS VS VS VS VS VS	217613 T 663149 B2 3217493 A 2088835 A1 1075959 A ,C 69331920 D1 69331920 T2 0554829 A2 2173875 T3 63392 A2 9500347 A3 104311 A 5246997 A 252151 B1 9300579 A1 30916 A 2128172 C1 5550147 A 5670533 A 9300077 A	15-06-2002 28-09-1995 12-08-1993 06-08-1993 08-09-1993 20-06-2002 26-09-2002 11-08-1993 01-11-2002 30-08-1993 28-09-1995 13-07-1997 24-09-1993 01-09-2000 30-09-1993 23-12-1997 27-03-1999 27-08-1996 23-09-1997 04-08-1993
WO 0218350 A	07-03-2002	AU WO JP	8252001 A 0218350 A1 2002145778 A	13-03-2002 07-03-2002 22-05-2002
WO 9932454 A	01-07-1999	AU BR CA EP JP WO ZA US	1724499 A 9813835 A 2314401 A1 1042299 A1 2001526268 T 9932454 A1 9811517 A 6271237 B1 2002016326 A1	12-07-1999 10-10-2000 01-07-1999 11-10-2000 18-12-2001 01-07-1999 15-06-2000 07-08-2001 07-02-2002